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IN THE LINE ED STATES PATENT AND TRADEMARK OFFICE

Application of: Sobek et al.

Application No.: 09/803,165

Group Art Unit: 1635

Filed: March 9, 2001

Examiner: Nguyen, L.

For:

MUTANT B-TYPE POLYMERASES

Attorney Docket No.: 5328

EXHIBITING IMPROVED PERFORMANCE IN PCR

BECEIVED

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

MAR 2 2 2002

Assistant Commissioner for Patents Washington, D.C. 20231

TECH CENTER 1600/2900

Sir:

Applicants have carefully considered the Office Action mailed November 6, 2001, in connection with the above-captioned Application. Reconsideration of the claims in light of the amendments and remarks that follow is respectfully requested. Filed herewith are Exhibit A, an Amendment Fee Sheet and a Petition for Extension of Time extending the period for responding by two months from February 6, 2002 to and including April 6, 2002.

AMENDMENT

IN THE CLAIMS

Please cancel Claims 1-14 and add new claims 15-29.

- 15. A mutant polymerase comprising a Y-GG/A amino acid motif between an N-terminal 3'-5' exonuclease domain and a C-terminal polymerase domain wherein the tyrosine of the Y-GG/A amino acid motif is substituted with another amino acid, and wherein the wild-type form of the mutant polymerase has at least 80 % amino acid homology to SEQ ID NO:34.
- 16. The mutant polymerase of Claim 15 that is suitable for polynucleotide amplification.